precipitation for the year was above the normal in the Florida Peninsula, Gulf States, Missouri Valley, slope and southern and middle Plateau and south Pacific regions; elsewhere it was below the normal.

Excesses of 10 inches, or more, occurred over east-central Florida, southwestern Alabama, Louisiana, the panhandle of Texas, central Missouri, the central portion of southern Michigan, southwestern South Dakota, southeastern Wyoming, and central Arizona. Deficiencies of 10 inches, or more, occurred in east-central New York, Massachusetts, east-central North Carolina, and eastern South Carolina—where it amounted to over 20 inches—northwestern California, western Oregon, and extreme western Washington. Over northwestern California and extreme northwestern Washington the deficiency ranged from 20 to over 28 inches.

Total precipitation, ranging in amount from about 63 to 93

inches, occurred in extreme northwestern Washington, eastcentral Florida, and the eastern part of the west and the western portion of the east Gulf States.

RELATIVE HUMIDITY.

The relative humidity was normal in the Middle Atlantic States, Florida Peninsula, and the north and south Pacific regions; below normal in New England, South Atlantic States, and northern Plateau and middle Pacific districts; elsewhere it was above the normal.

CLOUDINESS.

The cloudiness was normal in New England and the middle Pacific districts, below normal in the northern Plateau, and above normal in the remaining geographic districts.

RECORD OF EARTQUAKES.

Summary of earthquakes recorded by the Bosch-Omori seismograph at Washington, D. C., during 1905.—Seventy-fifth meridian time.

By Prof. C. F. Marvin, in charge of Instrument Division.

Date.	Component, NS. or EW.	Time of day.					Duration of-				ij	eord.	am- l dis- earth ph.
		First preliminary tremors	Second preliminary tremors	Principal por- tion began.	Principal portion ended.	End of earth- quake.	First preliminary tremors.	Second prelimi- nary tremors.	Principal por- tion.	Earthquake.	Period of pendulum.	Magnification of re	Maximum double amplitude of actual displacement of the earth
1905. January 20, p. m	4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4	h. m. s. 1 06 37 4 14 10 10 59 32 8 14 49 2 53 49 2 50 4 35 10 10 13 10 11 00 13 10 11 72 2 13 45 1 17 20 4 46 00 4 45 50 1 00 00 5 27 30 5 27 25 7 52 35 12 42 45 12 31 30 4 47 34 4 47 34 4 47 34 4 47 34 4 47 34 4 47 33 6 33 30 6 33 00	h. m. s. 1 10 58 4 23 00 11 12 42 8 36 13 5 22 07 10 25 33 10 24 00 1 23 35 1 33 05 4 49 20 8 02 45 8 03 14 12 42 44	h, m, s, 1 14 38 4 31 21 11 12 4 06 8 51 15 5 33 42 5 33 42 10 30 40 10 37 45 1 38 40 11 03 00 11 03 00 11 03 00 11 03 00 5 32 00 11 03 00 5 42 00 8 05 32 12 47 42 12 47 42 12 47 42 12 47 42 12 47 42 12 47 42 16 36 45 45 2 45 45 2 45 45 2 45 46 02 00 6 36 45	h, m. s. 1 20 32 4 35 36 11 26 17 8 54 13 2 58 46 27 10 59 00 10 53 00 2 01 10 1 57 37 4 38 10 4 54 20 1 05 00 1 05 51 00 8 13 50 8 25 46 12 51 24 12 51 24 12 51 24 16 40 18	h, m. s. 1 29 15 5 20 00 0 13 12 10 45 07 4 24 00 0 21 30 0 46 15 4 05 5 6 35 5 40 22 1 23 6 35 5 40 21 1 23 6 35 5 40 21 1 23 6 35 5 40 21 1 23 6 35 5 40 21 1 23 6 6 35 5 40 30 9 04 30 9 04 30 9 08 30 9 08 30 9 08 30 9 08 30 7 32 15	4 21 8 50 13 12 21 24 3 50 17 32 	m. s. 3 40 8 21 11 24 15 02 11 35 13 27 6 40 15 35 13 45 15 15 15 15 15 15 15 15 15 15 15 15 15	m. s. 5 54 5 2 11 2 58 1 16 12 45 20 00 22 20 5 3 25 18 57 1 15 3 25 1 15 3 3 42 3 3 0 2 24 1 00 3 3 33	h. m. s. 0 23 38 1 05 50 1 13 40 2 30 18 0 22 10 1 29 50 0 19 00 2 11 17 2 35 16 1 03 17 1 32 33 2 19 00 2 0 25 0 54 36 0 28 15 (?) 0 34 30 1 41 05 1 12 30 1 16 30 1 16 30 1 15 30 0 34 12 0 54 36 0 16 35 0 59 15	Sec. 28 28 28 28 27 27 26 30 26 32 43 1 27 23 8 21 2 28 21 2 28 21 2 28 21 2 28 21 2 28 21 2	Times. 10 10 10 10 10 10 10 10 10 10 10 10 13.2 10 13.2 10 13.2 10 13.5 10 10.5 10 10.5	mm. 0. 22 0. 22 0. 35 1. 23 0. 10 0. 81 0. 01 5. 40 0. 20 0. 35 0. 87 0. 10 0. 30 0. 35 0. 11 0. 08 0. 26 0. 33 0. 59 3. 00 0. 60 0. 50 0. 0. 50 0. 0. 50 0. 0. 50